CLAIMS

What is Claimed is:

1. In an electronic device having a display and a processor, a method for providing contrast adjustment for said display comprising the steps of:

a) receiving a contrast setting that is user defined;

b) generating signals representative of the ambient temperature of said display over time;

c) sampling said signals and converting said signals into current temperature values;

d) based on said contrast setting and said current temperature values, computing a contrast adjustment voltage signal for maintaining said contrast setting, wherein said steps c) and d) are performed by said processor; and

e) automatically adjusting contrast of said display by applying said contrast adjustment voltage signal to said display; and

2. A method as described in Claim 1 further comprising the step of f) repeating steps b) - d).

3. A method as described in Claim 1 wherein said step b) comprises the step of using a temperature sensitive diode circuit to generate a voltage signal based on said ambient temperature.

4. A method as described in Claim 3 wherein said step b) further comprising the step of using an analog to digital converter to convert said voltage signal into a digital value.

5. A method as described in Claim 1 wherein said step d) comprises the step of indexing a look-up table with said contrast setting and said current temperature values to compute said contrast adjustment voltage signal.

6. A method as described in Claim 1 wherein said step d) comprises the step of inputting said contrast setting and said current temperature values to a formula to compute said contrast adjustment voltage signal.

7. A method as described in Claim 1 wherein said display screen is a liquid crystal display (LCD) display screen.

8. A method as described in Claim 1 wherein said electronic device is a portable hand-held computer system.

9. A method as described in Claim 1 wherein step a) comprises the step of receiving said contrast setting via a software graphical user interface.

10. An electronic device comprising:

a processor coupled to a bus;

a display coupled to said bus and responsive to a contrast adjustment signal;

a temperature sensing circuit for generating signals representative of the ambient temperature of said display over time, and

wherein said processor automatically compensates display contrast based on said ambient temperature by performing the steps of:

a) receiving a contrast setting that is user defined;

b) sampling said signals and converting said signals into current temperature values;

c) based on said contrast setting and said current temperature values, computing a contrast adjustment voltage signal for maintaining said contrast setting; and

d) automatically adjusting contrast of said display by applying said contrast adjustment voltage signal to said display.

11. A device as described in Claim 10 wherein said temperature sensing circuit comprises:

a temperature sensitive diode circuit for generating a voltage signal based on said ambient temperature; and

an analog to digital converter to convert said voltage signal into a digital value.

12. A device as described in Claim 10 wherein said step c) comprises the step of indexing a look-up table with said contrast setting and said current temperature values to compute said contrast adjustment voltage signal.

13. A device as described in Claim 10 wherein said step c) comprises the step of inputting said contrast setting and said current temperature values to a formula to compute said contrast adjustment voltage signal.

14. A device as described in Claim 10 wherein said display screen is a liquid crystal display (LCD) display screen and wherein said electronic device is a portable hand-held computer system.

15. A device as described in Claim 10 wherein step a) comprises the step of receiving said contrast setting via a software graphical user interface.

16. A palm-top computer system comprising:

a processor coupled to a bus;

a flat panel display coupled to said bus and responsive to a contrast adjustment signal;

a temperature sensitive diode circuit for generating signals representative of the ambient temperature of said display over time, and

wherein said processor automatically compensates display contrast based on said ambient temperature by performing the steps of:

a) receiving a contrast setting that is user defined via a software graphical user interface displayed on said display;

b) sampling said signals and converting said signals into current temperature values;

c) based on said contrast setting and said current temperature values, computing a contrast adjustment voltage signal for maintaining said contrast setting; and

d) automatically adjusting contrast of said display by applying said contrast adjustment voltage signal to said display.

17. A computer system as described in Claim 16 further comprising an analog to digital converter to convert said signals from said temperature sensitive diode circuit into digital values.

18. A computer system as described in Claim 16 wherein said step c) comprises the step of indexing a look-up table with said contrast setting and said current temperature values to compute said contrast adjustment voltage signal.

19. A computer system as described in Claim 16 wherein said step c) comprises the step of inputting said contrast setting and said current temperature values to a formula to compute said contrast adjustment voltage signal.

20. A computer system as described in Claim 16 wherein said display screen is a liquid crystal display (LCD) display screen and wherein said electronic device is a portable hand-held computer system.